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IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER DUFFY, DAVID W	
			ART UNIT 3714	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 09/941,251	Applicant(s) BANERJEE ET AL.	
	Examiner DAVID W. DUFFY	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,12,13,15,21,22 and 51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,12,13,15,21,22 and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This office action is in response to the amendment filed 07/28/2008 in which applicant amends claim 51. Claims 1-5, 7, 12-13, 15, 21-22 and 51 are pending.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3, 12, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661).

4. In regards to claims 1 and 3, Thomas discloses a test timing system that discloses a computerized testing device that conducts testing for a user whereby a question is presented to the user and the time taken by the user to answer the question is tracked, displayed, and compared to a predetermined time (2:5-20 and 4:45-65). Thomas further discloses that the system may be used to practice examination skills and improve test taking skills (3:4-14) and that the system maintains player profiles in order to provide a history of the user's progress including performance by subject or topic (7:43-58). Thomas lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions are based on levels of difficulty of the test questions and the ability of the test taker.

5. In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides

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the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (917-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) where the question presentation is adjusted by the user's skill (11:25-30) and a preset time limit for each question (6:63-40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

6. Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to further aid the test taker in completing the test in the allotted time while giving as much time as necessary to correctly answer questions and customize the tests presented to the user's ability.

7. The combination of Thomas and Sugimoto does not explicitly disclose that a user alert is generated after the question timing data exceeds an alert threshold and shows the time remaining. Rather, Thomas discloses a constant display of a predetermined time and the elapsed time taken for the question that is periodically updated (4:45-65).

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However, at the time of the invention it would have been an obvious matter of design choice, well within the abilities of one skilled in the art to have used an alert after the time or the constant display of Thomas as each produces the expected result of apprising the test taker of the time constraints for the test question, where one would recognize that the elapsed time and the predetermined time may be used to determine the time remaining. Accordingly, such a modification fails to distinguish over the prior art. Furthermore, it would have been obvious to one of ordinary skill in the art to include an indication of the total time remaining for the test when the system is used for an actual test as the system of Thomas is intended to prepare a user to take a test within a set amount of time.

8. In regards to claim 2, Thomas discloses the system is a computer program on a computer (3:53-65).

9. In regards to claim 12, Thomas discloses that the score for the test questions is stored in permanent storage (6:38-41 and Table 1).

10. In regards to claims 21 and 22, Thomas discloses the storage of responses to test questions by the test taker and the question timing data for each question (6:37-60), but does not explicitly the use of the stored data to update the customized alert profile for use in future tests.

11. In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user

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(9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (9:17-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) where the question presentation is adjusted by the user's skill (11:25-30) and a preset time limit for each question (6:63-7:40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

12. Therefore it would have been obvious to one skilled in the art at the time of the invention to have modified Thomas in view of Sugimoto to have used to the test question and timing history in order to aid the test taker on future tests in order to help the test taker improve their performance.

13. Claims 4-5, 7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) as applied to the claims above and further in view of admitted prior art.

14. In regards to claims 4, 5, and 7, the billing for services rendered is regarded as old and well known in the art in view of the admitted prior art.

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15. In regards to claims 13, that test creators may be different entities than test administrators is regarded as old and well known in the art in view of the admitted prior art.

16. Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) as applied to the claims above, and further in view of Kershaw; Roger C. et al. (US 5827070 A).

17. In regards to claim 15, Thomas discloses the system as set forth above, but does not explicitly disclose a session identification established for the presentation of the test questions by a proctor device, including a device identifier and wherein outputting test question timing data to the proctor device is based on the proctor device identifier.

18. In related prior art, Kershaw discloses a test creation and administration system that discloses the collection of statistical data on all examinees taking a certain test (2:8-16) as well as the recording of a test program id, registration id, test center id, and workstation id for each test taker in order to provide an audit trail (73:27-74:26). One skilled in the art would recognize the advantage of maintaining detailed records on test takers to provide accurate records to ensure that no cheating or errors occurred.

19. Therefore it would have been obvious to one skilled in the art at the time of the invention to have modified Thomas in view of Sugimoto further in view of Kershaw to have included session identification and proctor identification to maintain accurate and detailed records of the test administration. The combination made does not explicitly disclose that the test question timing data is output to the proctor device based on the proctor device identifier. However, it would have been obvious to base the sending of

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timing data on proctor id as testing centers commonly provide multiple tests simultaneously and the individual proctors would only need the timing data for the tests they are monitoring thus reducing the data traffic overhead.

20. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw in view of Thomas (US 5885087), Hoehn-Saric (US 5915973) and Sugimoto (US 6755661).

21. Kershaw discloses a test administration system that records statistical data about test takers and identification system about each test taker (2:8-16 and 4:3-5:2). Data recorded includes session identification, test identification with several tests listed suggesting the capability for multiple tests to be presented by the system (73:35-74:27). While Kershaw does track test results for the creation of performance statistics, it lacks in explicitly stating the tracking of question timing data or instant messaging.

22. In analogous testing system, Thomas discloses the tracking of question timing data and the comparison to predetermined time data (2:5-20 and 4:45-65). One skilled in the art would recognize the advantage of including time data in the statistics gathered by Kershaw in order to more accurately determine overall difficulty of a question as well as the notification feature in order to provide to the test takers time indication as standardized tests are time limited and keeping track of user's time is very important (4:49-51).

23. In an analogous test administration system, Hoehn-Saric discloses that the administrator of a test has great flexibility in sending and receiving messages associated with the administration of a test including data based communications (3:64-

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4:3, 5:19-40, 7:7-13, 7:23-27, 9:18-24, and 10:42-48). This flexibility may include sending and responding to messages with the test product users as quickly as the physical interconnection is capable of processing and sending them, making them "instant messages".

24. All of the component parts are known in Kershaw, Thomas and Hoehn-Saric. The only difference is the combination of the "old elements" into a single system by including the component parts in a single administrative system.

25. Thus it would have been obvious to one having ordinary skill in the art to include the instant messaging taught by Hoehn-Saric and the test question timing of Thomas with the test administration system of Kershaw, since the operation of the instant messaging and the question timing is not dependant on the operation of the test administration system and the other components could be used in combination with a test administration system to achieve the predictable results of a test administration system with test timing and instant messaging.

26. The combination made lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions is based on levels of difficulty of the test questions and the ability of the test taker.

27. In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user

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(9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (9:17-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) and a preset time limit for each question (6:63-7:40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

28. Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to further aid the test taker in completing the test in the allotted time while giving as much time as necessary to correctly answer questions and customize the tests presented to the user's ability.

29. The combination made does not explicitly disclose that a user alert is generated after the question timing data exceeds an alert threshold and shows the time remaining. Rather, Thomas discloses a constant display of a predetermined time and the elapsed time taken for the question that is periodically updated (4:45-65). However, at the time of the invention it would have been an obvious matter of design choice, well within the abilities of one skilled in the art to have used an alert after the time or the constant display of Thomas as each produces the expected result of apprising the test taker of

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the time constraints for the test question, where one would recognize that the elapsed time and the predetermined time may be used to determine the time remaining.

Accordingly, such a modification fails to distinguish over the prior art. Furthermore, it would have been obvious to one of ordinary skill in the art to include an indication of the total time remaining for the test when the system is used for an actual test as the system of Thomas is intended to prepare a user to take a test within a set amount of time.

Response to Arguments

30. Applicant's arguments filed 07/28/2008 have been fully considered but they are not persuasive.

31. Applicant argues that examiner has not alleged a teaching or suggestion of a user alert after a predetermined period that shows the time remaining for a question and for an entire test. Examiner respectfully disagrees. Thomas discloses showing an alert that displays the elapsed time and a predetermined or suggested time for the question, where one would recognize that the time remaining for the question would be easily obtained through subtraction. Thomas further discloses that the intent is to prepare the user for a full length timed test and as such provides the suggestion that when applied to a test, the time remaining for the entire test should be provided since the intent of the entire invention of Thomas is to aid the user in completing a test in the allotted amount of time. Because Thomas provides the teachings or suggestions of the alert message, the instant applicant fails to distinguish over the prior art of Thomas for the content of the alert message.

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32. While Thomas discloses that the alert is constant, it would have been an obvious design choice to have modified the constant display to a timed alert message as both systems would have produced the expected result of apprising the user of the time taken versus the suggested time for the test question and providing pacing aid to finish the test in the allotted amount of time. Furthermore such a modification would have been well within the abilities of one of ordinary skill in the art at the time of the invention.

33. In regards to applicant's arguments that Thomas in view of Sugimoto does not teach or suggest a preset time based on a user profile, examiner respectfully disagrees. Thomas discloses that the performance of the users is tracked and stored in a database for the system. Sugimoto teaches an adaptive testing system that modifies the suggested time for a question (analogous to Thomas's predetermined time) based on a user's profile, skill level and the question difficulty. One skilled in the art would have recognized the advantages taught by Sugimoto to adapt the suggested time for a question based on a user's skill level as determined by previous testing and the skill rating of the question in order to provide a suggested time to the user of the test system of Thomas that would provide the user with the best chance of finishing the timed test in the time allotted with the most correct answers as possible and thus pass the test. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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34. With respect to claim 3, applicant argues that Sugimoto does not teach or suggest that the presentation of test questions is based on the difficulty of the question and the ability of the examinee. Examiner respectfully disagrees. Sugimoto discloses that the test question difficulty may be dependant upon the skill level of the examinee (11:26-31) such that the questions become more difficult as the user's skill level increases.

35. In regards to applicant's arguments for claim 15, examiner respectfully disagrees. The combination of Thomas and Sugimoto teaches the system of providing adaptive question timing to aid a user in completing a test in a predetermined amount of time. Kershaw discloses a proctoring device that provides various data recording and aid to test takers and records a session identifier for each test taker for identification. One skilled in the art would recognize that when providing the services of Thomas in view of Sugimoto over the proctoring device taught by Kershaw, that it would be obvious to use the identifying information such as session number to ensure that the proper test timing data was sent to the proper user. If no identifying information was used it would not be possible to ensure that data was delivered properly.

36. With respect to applicant's arguments for claim 51, examiner respectfully disagrees. The combination of Thomas, Sugimoto and Kershaw fairly teaches or suggests the system detailed above. Hoehn-Saric teaches that test proctors may communication with test takers over many communication mediums (data, voice, or two way video) where one of ordinary skill would recognize that data communications are instant messaging systems as they send electronic data as fast as the network system

is capable. As test takers routinely require aid, it would be obvious to incorporate the teachings of Hoehn-Saric of a rapid communication system with proctors into the system of Thomas, Kershaw and Sugimoto to provide aid to the test taker as quickly as possible.

Conclusion

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID W. DUFFY whose telephone number is (571)272-1574. The examiner can normally be reached on M-F 0830-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/D. W. D./
Examiner, Art Unit 3714

/Corbett Coburn/
Primary Examiner
AU 3714